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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,185	10/30/2000	Shirley Lee	10982031-1	1662

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	Application No. 09/702,185	Applicant(s) LEE ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☒ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attachment.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 17,21-27,30,32 and 50-57.

Claim(s) withdrawn from consideration: 1-16 and 34-39.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Callie E. Shosho  
Primary Examiner  
Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' amendment filed 8/21/03 has been considered but it has not been entered given that the amendment raises the issue of new matter.

(i) In response to examiner's rejection under 35 USC 112, second paragraph as set forth in paragraph 5 of the office action mailed 6/26/03 indicating that the scope of claims 17 and 27 is confusing because it is not clear what type of molecular weight was referred to in the claims – weight average, number average, etc., applicants have amended claims 17 and 27 to each recite that the cationic polyelectrolyte molecular weight is "weight average molecular weight."

While examiner appreciates applicants response to the rejection, it is the examiner's position that this phrase, "weight average molecular weight", fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the phrase weight average molecular weight in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed. While the present specification refers to molecular weight, there is no disclosure of "weight average molecular weight".

**NOTE:** If applicants' were to submit a declaration stating that the molecular weight referred to in the present invention is in fact weight average molecular weight and further, how it is determined or known that the molecular weight referred to in the present invention is in fact weight average, i.e. by disclosing how the molecular weight was measured, this would overcome the 35 USC 112, second paragraph rejection of record as set forth in paragraph 5 of the office

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action mailed 6/26/03. It is noted that if such declaration were submitted, there would be no need to insert "weight average" into either claim 17 or claim 27.

(ii) Applicants' have amended claims 17 and 27 to recite that the molecular weight of the cationic polyelectrolyte is "over 1000 and up to 10,000" (**NOTE:** In the amendment filed 8/21/03, claim 17 on page 2 actually discloses molecular weight of "1000 and up to 10,000". On page 6 of the amendment, applicants state that claim 17 has been amended identically to claim 27 to recite molecular weight of "over 1000 and up to 10,000". In the following arguments, examiner assumes that applicants did in fact mean to amend claim 17 to recite that the lower limit of the molecular weight is "over 1000"). It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of molecular weight of "over 1000 and up to 10,000" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163.

As support for this recitation, applicants point to page 9, line 1. However, this portion of the specification only recites that the molecular weight of the cationic polyelectrolyte is in the range of 1000-10,000. There is no disclosure that the lower limit of the molecular weight is "over 1000". That is, while there is support for lower limit of molecular weight of "1000", there is no support for the recitation of the lower limit as "over 1000".

Further, even if the change to the molecular weight range were entered, i.e. cationic polyelectrolyte molecular weight is "over 1000 and up to 10,000", it is the examiner's position that such change would not overcome the rejections of record.

Applicants argue that given that in light of the amendment to the molecular weight range, both Kurabayashi et al. (U.S. 5,700,314) and Takahashi et al. (U.S. 5,624,484) are no longer relevant references against the present claims given that each reference discloses cationic component, i.e. quaternary ammonium compound, which has molecular weight of 1000 or less.

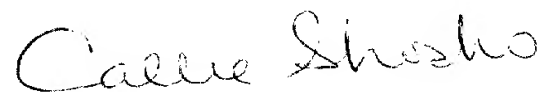
However, the recitation in the claims that the cationic polyelectrolyte molecular weight is "over 1000" can read on molecular weight such as 1000.5, 1001, 1002, etc. Thus, it is apparent, that the instantly claimed molecular weight and that taught by either Kurabayashi et al. or Takahashi et al. are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the cationic polyelectrolyte molecular weight disclosed by either Kurabayashi et al. or Takahashi et al. and the cationic polyelectrolyte molecular weight disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the molecular weight disclosed in the present claims is but an obvious variant of the molecular weight disclosed in either Kurabayashi et al. or Takahashi et al., and thereby one of ordinary skill in the art would have arrived at the claimed invention.

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**NOTE:** If applicants were to change the molecular weight range to "2000 –10,000", the rejections of record would be overcome given that both Kurabayashi et al. (U.S. 5,700,314) and Takahashi et al. (U.S. 5,624,484) disclose cationic component which has molecular weight of 1000 or less. Support for the recitation of 2,000 as the lower limit of the molecular weight is found, for instance, on page 19, example 2.

(iii) It is noted that if the amendment filed 8/21/03 had been entered, the 35 USC 112, first paragraph rejection of record as set forth in paragraph 3 of the office action mailed 6/26/03, would have been overcome.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
9/10/03